

## DESCRIPTION

Recessed medium beam lens downlight luminaire with 4 inch square aperture utilizing horizontal 26W DTT or 26/32/42W TTT compact fluorescent lamps. Modular platform can be reconfigured from below the ceiling to accept a broad range of lamp modules and optical elements. Platform is suitable for shallow plenum commercial construction. Insulation must be kept 3" from top and sides of housing. Platform + module + element combination produces square distribution with excellent light control and low aperture brightness.

## SPECIFICATION FEATURES

## Frame

Galvanized steel plaster frame with integral bar hanger receivers. Set-screws provide positive horizontal locking.

## Collar

Matte black steel collar adjusts vertically for 1/2" - 1" thick ceilings and can be rotated +/- 7.5° thru the aperture. Integral gun sights facilitate the use of guide strings or laser lines. Shipped with a paint overspray protector installed in the collar.

## Lamp Module

Installed or removed thru the aperture or from the top and allows lamp orientation at 0°, 90°, 180° and 270° positions (except 26W DTT or 42W TTT lamps).

## Housing

Steel housing painted matte black for a visually dark interior. Removable hinged top allows for top access. All fasteners are captive.

## Gaskets

Closed cell gaskets achieve restrictive airflow requirements without additional caulking.

## Optical Element

Mousetrap type springs pull flange tight to ceiling. Light trap eliminates spill light at edge of flange and reflector. Available in self-flanged or metal trim ring versions.

## Bar Hangers

Captive preinstalled bar hangers adjust from 8-1/2" to 24" wide; pass thru feature allows shortening without removal. Captive nail penetrates standard and engineered lumber. Mounting flange levels platform with ceiling. Integral clip attaches directly to t-bar.

## Butterfly Bracket

Provides 3" of vertical adjustment and accept 1/2" EMT, C channel or bar hangers.

## Primary Reflector

Miro® Erotek segmented upper reflector yields a smooth square beam with medium distribution. Accepts 26W DTT or 26/32/42W TTT compact fluorescent lamps.

## Lower Reflector

Aluminum parabolic shielding prismatoid integral clear glass lens provides for 55° cutoff and is available in a wide range of semi specular Alzak® finishes. Corrugated Baffle: An optional embossed pattern that extends through the flange adding a subtle design element and reduces aperture brightness.

## Junction Box

(7) 1/2" trade size pry outs, (3) integral clamps for non-metallic cable. Rated for (8) #12 thru branch circuits. Wago® type push wire connectors for field connections

## Thermal Protector

Self-resetting thermal protector protects against improper lamping and direct contact with insulation.

## Ballast

Universal input electronic ballast features multi-watt capability operating 26W DTT and 26/32/42W TTT lamps with full lumen output. Programmed rapid start allows use with occupancy sensors and building control systems.

## Lamp Socket

4 pin Gx24q3/4 base with rotary lock socket ensures positive lamp retention. Lamp socket locks into one of two positions accommodating different lamp lengths.

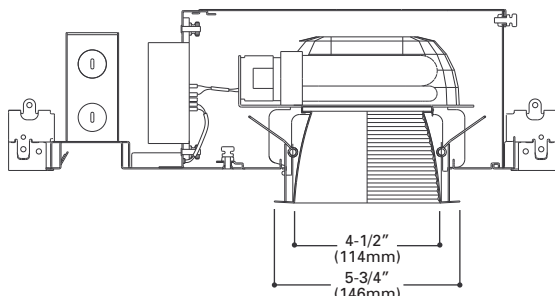
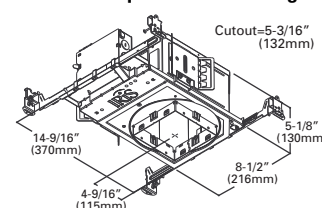
## Code Compliance

Thermally protected and cULus listed for protected wet locations and ASTM-E283 AIRTITE(tm).



## P406TAT MH4CFL42E E4DLSR E4DLSRCB 26W DTT, or 26/32/42W TTT Compact Fluorescent

## 4 Inch Square Lens Downlight



**ORDERING INFORMATION:** Complete unit consists of platform, lamp module and optical element.

Platform	Lamp Module	Ballast Option	Optical Element	Finish	Flange	Accessories
	<b>MH4CFL</b>					
<b>P406TAT</b> = 4" Square Aperture Non-IC Housing  <b>P406TCP</b> = 4" Square Aperture Non-IC Chicago Plenum Housing  <b>MH4CFL</b> = Horizontal Compact Fluorescent Lamp Module	<b>42E</b> = 26W DTT 26/32/42W TTT 120-277V UNV <b>423E</b> = 26W DTT 26/32/42W TTT 347V <b>1D26</b> = 26W DTT/TTT Lutron TuWire Dimming 120V  <b>1D32</b> = 32W TTT Lutron TuWire Dimming 120V	<b>E4DLSR</b> = 4" Square Aperture Lower Shielding Prismatoid, Lens <b>E4DLSRCB</b> = 4" Square Aperture Corrugated Lower Shielding Prismatoid, Lens	<b>Alzak® Finishes</b> <b>H</b> = Clear Haze <b>WMH</b> = Warm Haze <b>WHH</b> = Wheat Haze <b>KH</b> = Cognac Haze <b>GPH</b> = Graphite Haze <b>CTH</b> = Cobalt Haze <b>CCH</b> = Chocolate Haze <b>BH</b> = Black Haze <b>Painted Finishes</b> <b>MW</b> = Matte White <b>MB</b> = Matte Black		<b>[Blank]</b> = Metal Trim Ring, Matte White <b>SF</b> = Self Flanged <b>SFWF</b> = Self Flanged, Matte White Flange (SFWF not available with corrugated baffle)	<b>EDC4x41</b> = Extended depth collar for 1" - 1-1/2" thick ceilings <b>EDC4x42</b> = Extended depth collar for 1-1/2" - 2" thick ceilings <b>L4X4LNR</b> = Skytek linear spread lens <b>L4x4SF</b> = Solite soft focus lens <b>L4x4SPD</b> = Crystal #73 prismatic spread lens <b>MTR4MW</b> = Metal trim ring, matte white <b>MTR4MB</b> = Metal trim ring, matte black <b>MTR4SN</b> = Metal trim ring, satin nickel <b>MTR4AC</b> = Metal trim ring, antique copper <b>MTR4TBZ</b> = Metal trim ring, tuscan bronze

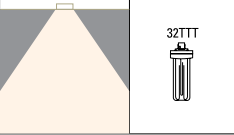
ENERGY DATA			
Min. Starting Temp -18°C	Sound Rating Class A		
EMI/RFI Emissions FCC Part 18	Input Frequency 50/60 Hz		
Power Factor > 0.98	THD < 10%		
Input Voltage	120V - 277V	347V	
26W	Input Power	29W	31W
	Input Current	0.24A	0.09A
32W	Input Power	36W	36W
	Input Current	0.31A	0.11A
42W	Input Power	46W	50W
	Input Current	0.38A	0.15A
ENERGY DATA - DIMMING			
Min. Starting Temp 10°C			
Sound Rating Inaudible in a 27dBa Ambient			
EMI/RFI Emissions FCC Part 18 Consumer Limits			
Input Frequency 60 Hz	Power Factor > 0.95		
Input Voltage 120V	THD < 20%		
26W Input Current	0.27A		
32W Input Current	0.33A		

## Photometrics

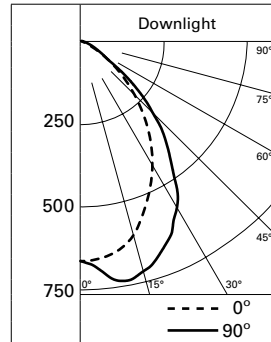
## Photometric Results

Spacing Criterion = 1, 1.3  
Efficiency = 46.0%

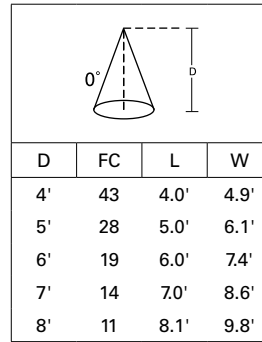
Test No. 254P233  
Platform = P4  
Element = E4DLSRH  
Lumens = 2400  
Lamp = CF32TTT/E/841



## Candlepower Distribution



## Cone of Light



## Candelas

Vertical Angle	CD
90	0
85	2
75	13
65	39
55	96
45	220
35	359
25	483
15	600
5	652
0	659

## Zonal Lumens Summary

Zone	Lumens	% Lamp	% Luminaire
0- 30	521	21.7	47.2
0- 40	783	32.6	70.9
0- 60	1057	44	95.7
0- 90	1104	46	100
90-180	0	0	0
0-180	1104	46	100

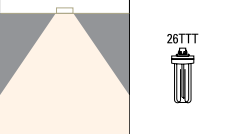
## Coefficients of Utilization

Ceiling Wall % RCR	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
Zonal cavity method -- floor reflectance = 20%						
0	55 55 55 55	53 53 53 53	51 51 51	49 49 49	47 47 47	46
1	52 50 49 47	50 49 48 47	47 46 45	45 44 44	44 43 42	42
2	48 45 43 41	47 45 42 41	43 41 40	42 40 39	40 39 38	37
3	45 41 38 36	44 41 38 36	39 37 35	38 36 35	37 35 34	33
4	42 38 35 32	41 37 34 32	36 34 32	35 33 31	34 32 31	30
5	39 34 31 29	38 34 31 29	33 30 28	32 30 28	32 29 28	27
6	37 32 28 26	36 31 28 26	31 28 26	30 27 25	29 27 25	24
7	34 29 26 24	34 29 26 23	28 25 23	28 25 23	27 25 23	22
8	32 27 24 21	32 27 24 21	26 23 21	26 23 21	25 23 21	20
9	30 25 22 20	30 25 22 20	24 22 20	24 21 20	24 21 19	19
10	29 23 20 18	28 23 20 18	23 20 18	22 20 18	22 20 18	17

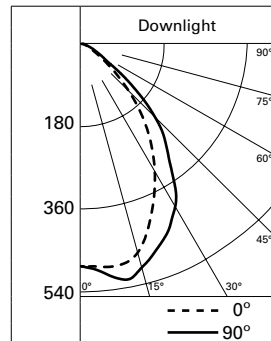
## Photometric Results

Spacing Criterion = 1, 1.2  
Efficiency = 43.6%

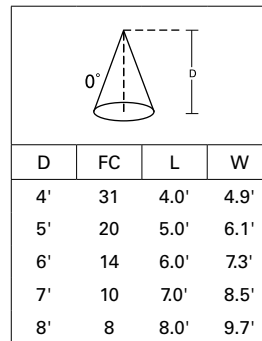
Test No. 254P228  
Platform = P4  
Element = E4DLSRH  
Lumens = 1800  
Lamp = CF26TTT/E/830



## Candlepower Distribution



## Cone of Light



## Candelas

Vertical Angle	CD
90	0
85	1
75	9
65	26
55	63
45	152
35	265
25	377
15	474
5	491
0	488

## Zonal Lumens Summary

Zone	Lumens	% Lamp	% Luminaire
0- 30	375	20.8	47.8
0- 40	561	31.2	71.5
0- 60	752	41.8	95.9
0- 90	785	43.6	100
90-180	0	0	0
0-180	785	43.6	100

## Coefficients of Utilization

Ceiling Wall % RCR	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
Zonal cavity method -- floor reflectance = 20%						
0	52 52 52 52	51 51 51 51	48 48 48	46 46 46	45 45 45	44
1	49 47 46 45	48 46 45 44	45 44 43	43 42 42	41 41 40	39
2	46 43 41 39	45 42 40 39	41 39 38	40 38 37	38 37 36	35
3	43 39 37 34	42 39 36 34	37 35 34	36 34 33	35 34 32	32
4	40 36 33 31	39 35 33 30	34 32 30	33 31 30	32 31 29	28
5	37 33 30 27	36 32 29 27	32 29 27	31 29 27	30 28 26	26
6	35 30 27 25	34 30 27 25	29 26 24	28 26 24	28 26 24	23
7	33 28 25 22	32 28 25 22	27 24 22	26 24 22	26 24 22	21
8	31 26 23 21	30 26 23 20	25 22 20	25 22 20	24 22 20	19
9	29 24 21 19	28 24 21 19	23 21 19	23 20 19	22 20 19	18
10	27 22 19 17	27 22 19 17	22 19 17	21 19 17	21 19 17	17